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Title: Statement of Work-Volume Control Dampers

Author(s): Spitzmiller, TJ

Intended for: **ASM Publication**



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Title: Statement of Work for Volume Control Dampers

Author(s): Michael A. Murphy
TJ Spitzmiller

Intended for: Fed Biz Ops
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Contracting Office Address

Department of Energy, Los Alamos National Laboratory (DOE Contractor), PO Box 1663 MS D442, Los Alamos, NM 87545.

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Request For Expression of Interest Design, Fabricate, and Deliver

Safety Related Volume-Control Dampers

For

The Chemistry & Metallurgy Research Replacement (CMRR) Facility.

Los Alamos National Laboratory (LANL) is seeking Expressions of Interest and Prequalification Data from qualified firms for the services described below.

GENERAL NOTES:

The Chemistry and Metallurgy Research Replacement (CMRR) Project is issuing Requests for Expressions of Interest and Prequalification Data (REO) for potential procurements of engineered equipment for the planned CMRR Nuclear Facility at the Los Alamos National laboratory. A bidders list will be developed for each type of engineered equipment to be procured. This action will be followed by issuance of formal Requests for Proposal (RFP) and the bid, evaluate, award (BEA) cycle will follow. The successful bidder will be released to perform design activities upon award.

The balance of the work (material purchase, fabrication, delivery) will be released upon completion of the Supplemental Environmental Impact Study (SEIS), the Record of Decision (ROD), and National Nuclear Security Administration's (NNSA) authorization to proceed.

The reason for proceeding in this manner is to resolve design criteria, allow for design progress, and reduce design risk without reaching a final design that commits the agency to a single option.

This request does not represent any confirmation by LANS of inclusion on the final bidders list, notification of subcontract award or authorization to commence any work related to this request. Equipment fabrication is not currently authorized and will be dependent upon Government approval after the NEPA process is complete.

SCOPE OF WORK:

The CMRR Project will need Safety Related Control Dampers for the CMRR Nuclear Facility HVAC system at Technical Area 55 of the Los Alamos National Laboratory (LANL). There are a total of 609 damper assemblies in varying sizes and configurations such as indicated in Table 1 attached.

The Safety Related Volume-Control Dampers shall be constructed to meet and exceed the functional requirements and quality standards defined by ASME AG-1-2003, Code on Nuclear

Air and Gas Treatment, and NQA-1 2008 with 2009 addenda, Quality Assurance Requirements for Nuclear Facility Applications. Additional requirements include but are not limited to:

- 1) To meet seismic qualification requirements for Performance Category PC-2, and PC-3.
- 2) To provide ventilation zone control and separation.
- 3) Damper testing according to ANSI/AMCA 500-D, Laboratory Methods of Testing Dampers for Rating, 2007.

Supplier to provide testing for the requirements identified above.

Installation of the dampers will be done by others under the supervision of the successful bidder.

SUPPLIER REQUIREMENTS:

Demonstrated safety performance equal to or lower than the following standards:

	Statistical Standards	
Experience Modification Rate	The "EMR" is a number that is assigned to your company based on the insurance premium you pay and your loss statistics. Contact your insurance company for these numbers.	Maximum Allowable Average:
Total Recordable Injury/Illness Case Rate (from Company OSHA 300 log)	Rate = <u>Total Recordable Injuries/Illnesses x 200,000</u> Total Employee Hours Worked	Maximum Allowable Average:
DART Case Rate (Days Away From Work, Restriction, or Job Transfer) (from Company OSHA 300	Rate = <u>Total Days Away/Restricted/Transferred Work Day</u> <u>Cases x 200,000</u> Total Employee Hours Worked	Maximum Allowable Average:

- Minimum of 5 years experience providing like equipment
- Provide your Organizational structure
- Table of contents from your Quality Assurance Manual and completion of the attached Quality Questionnaire.
- Listing of references who can confirm your capabilities. References must be based on work performed within the last 5 years, but with an emphasis on the last 3 years.

Interested contractors that meet the above criteria may contact Mike Murphy, CMRR Purchasing Manager (mamurphy@lanl.gov), TJ Spitzmiller, CMRR Procurement (tispitz@lanl.gov) or Theresa Paisano (theresap@lanl.gov).

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety Classification	Seismic Classification	Notes
HVAV-VD-0049	MH-66800		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0052	MH-66800		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0001	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0002	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0003	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0004	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0005	MH-66807	· ·	STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0006	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0007	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0008	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0009	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0010	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0011	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0012	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0013	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0014	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0015	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0016	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0017	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0018	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0021	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0022	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0023	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0024	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0025	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0026	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0027	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0028	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0029	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0030	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0032	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0060	MH-66807		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0033	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0034	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	

	Primary	Physical			Design	Frame/Seat			T
Client Tag	Drawing Number (P&ID)	Drawing Number	Damper Material	Damper Size	Flow Rate (cfm)	Leakage Class	Safety	Seismic Classification	Notes
HVAV VD 0035	MH 66808		STAINLESS	Later	Later	N	SS	PC3	
HVAV-VD-0036	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0037	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0038	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0039	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0040	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0061	MH-66808		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0041	MH-66809		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0042	MH-66809		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0043	MH-66809		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0044	MH-66809		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0045	MH-66809		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0046	MH-66809		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0047	MH-66809		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0019	MH-66810		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0048	MH-66810		STAINI ESS	Later	l ater	A/-	SS	PC3	
HVAV-VD-0050	MH-66810		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV VD 0051	MH 66810		STAINLESS	Later	Later	N/	SS	PC3	
HVAV-VD-0020	MH-66811		STAINLESS	Later	Later	A/-	SS	PC3	
1 IVAV-VD-0053	MH-66811		STAINLESS	Later	Later	A/-	SS	PC3	
1 IVAV-VD-0054	MH-66811		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0055	MH-66811		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0031	MH-66812		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0057	MH-66812		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0058	MH-66812		STAINLESS	Later	Later	A/-	SS	PC3	
HVAV-VD-0059	MH-66812		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0001	MH-67009		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0034	MH-67010		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0035	MH-67010		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0036	MH-67010		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0037	MH-67010		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0038	MH-67010		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0039	MH-67010		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0040	MH-67010		GALV.	Later	Later	B/-	SS	PC3	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HV72-VD-0510	MH-67010		GAIV	l ater	l ater	B/-	SS	PC3	
HV72-VD-0046	MH-67011		GALV	Later	Later	B/-	SS	PC3	
HV72-VD-0047	MH-67011		GA: V	Later	l ater	B/-	SS	PC3	
HVZ2-VD-0048	MH-67011		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0049	MH-67011		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0050	MH-67011		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0051	MH-67011		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0052	MH-67011		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0509	MH-67011		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0058	MH-67012		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0059	MH-67012		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0060	MH-67012		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0061	MH-67012		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0062	MH-67012		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0063	MH-67012		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0064	MH-67012		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0508	MH-67012		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0070	MH-67013		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0071	MH-67013		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0072	MH-67013		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0073	MH-67013		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0074	MH-67013		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0075	MH-67013		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0076	MH-67013		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0507	MH-67013		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0082	MH-67014		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0083	MH-67014		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0084	MH-67014		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0085	MH-67014		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0086	MH-67014		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0087	MH-67014		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0088	MH-67014		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0506	MH-67014		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0002	MH-67015		GALV	Later	Later	B/-	SS	PC3	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HVZ2-VD-0394	MH-67015	2	GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0094	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0095	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0096	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0097	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0098	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0099	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0100	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0505	MH-67016		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0106	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0107	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0108	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0109	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0110	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0111	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0112	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0504	MH-67017		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0118	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0119	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0120	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0121	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0122	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0123	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0124	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0503	MH-67018		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0130	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0131	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0132	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0133	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0134	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0135	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0136	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0502	MH-67019		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0142	MH-67020		GALV.	Later	Later	B/-	SS	PC3	

	Primary Drawing	Physical Drawing	Damper	Damper	Design Flow Rate	Frame/Seat Leakage	Safety	Seismic	
Client Tag	Number (P&ID)	Number	Material	Size	(cfm)	Class	Classification	Classification	Notes
HVZ2-VD-0143	MH-67020		GALV.	Later	Later	B/-	SS	PC3	
I IVZ2-VD-0144	MI I-67020	-	GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0145	MH-67020		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0146	MH-67020		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0147	MH-57020		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0148	MH-57020		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0501	MH-57020		GALV.	Later	Later	В/-	SS	PC3	
HVZ2-VD-0003	MH-67021		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0154	MH-67022		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0155	MH-57022		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0156	MH-67022		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0157	MH-67022		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0158	MH-67022		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0159	MH-67022		GALV.	Later	Later	B/-	SS	PC3	
HV72-VD-0160	MH-67022		GAI V	l ater	l ater	B/-	SS	PC3	
HVZ2-VD-0520	MH-67022		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0166	MH-67023		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0167	MH-67023		GALV.	Later	Later	B/-	SS	PC3	
1 IVZ2-VD-0168	MH-67023		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0169	MH-57023		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0170	MH-97023		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0171	MH-57023		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0172	MH-57023		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0519	MH-57023		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-01/8	MH-57024		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0179	MH-57024		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0180	MH-67024		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0181	MH-57024		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0182	MH-67024		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0183	MH-67024		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0184	MH-57024		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0518	MH-67024		GALV.	Later	Later	B/-	SS	PC3	
HV72-VD-0190	MH-67025		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0191	MH-67025		GALV.	Later	Later	B/-	SS	PC3	

25	Primary Drawing	Physical Drawing	Damper	Damper	Design Flow Rate	Frame/Seat Leakage	Safety	Seismic	
Client Tag	Number (P&ID)	Number	Material	Size	(cfm)	Class	Classification	Classification	Notes
HVZ2-VD-0192	MH-67025		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0193	MH-67025		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0194	MH-67025	-	GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0195	MH-67025		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0196	MH-67025		GALV.	Later	Later	B/-	SS	PC3	
I IVZ2-VD-0517	MII-67025		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0202	MH-67026		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0203	MH-67026		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0204	MH-67026		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0205	MH-67026		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0206	MH-67026	_	GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0207	MH-67026		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0208	MH-67026		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0516	MH-67026		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0004	MH-67027		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0214	MH-67028		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0215	MH-67028		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0216	MH-67028		GALV.	Later	Lalei	B/-	SS	PC3	
11VZ2-VD-0217	MII-67028		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0218	MH-67028		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0219	MH-67028		GALV.	Later	Later	B/-	SS	PC3	
HV72-VD-0220	MH-67028		GAI V	Later	ater	B/-	SS	PC3	
HVZ2-VD-0515	MH-67028		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0226	MH-67029		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0227	MH-67029		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0228	MH-67029		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0229	MH-67029		GALV.	Later	Later	B/~	SS	PC3	
HVZ2-VD-0230	MH-67029		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0231	MH-67029		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0232	MH-67029		GALV.	Later	Lalei	B/-	SS	PC3	
HVZ2-VD-0514	MH-67029		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0238	MH-67030		GALV.	Later	Later	B/-	SS	PC3	
HVZ2 VD 0239	MH 67030		GALV.	Later	Later	B/	SS	PC3	
HVZ2-VD-0240	MH-67030		GALV.	Later	Later	B/-	SS	PC3	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety Classification	Seismic Classification	Notes
HVZ2-VD-0241	MH-67030		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0242	MH-67030		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0243	MH-67030		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0244	MH-67030		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0513	MH-67030		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0250	MH-67031		GALV.	Later	Later	B/-	SS	PC3	
11VZ2-VD-0251	MH-67031		GALV.	Later	Later	B/-	SS	PC3	
HVZ2 VD 0252	MH 67031		GALV.	Later	Later	B/	SS	PC3	
HVZ2-VD-0253	MH-67031		GALV.	Later	Later	B/-	SS	PC3	
HV72-VD-0254	MH-67031		GAI V	Later	Later	B/-	SS	PC3	
HVZ2-VD-0255	MH-67031		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0256	MH-67031		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0512	MH-67031		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0262	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0263	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0264	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0265	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0266	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0267	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
1 IVZ2-VD-0268	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0511	MH-67032		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0005	MH-67033		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0274	MH-67034		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0275	MH-67034		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0276	MH-67034		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0277	MH-67034		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0278	MH-67034		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0279	MH-67034		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0280	MH-67034		GALV.	Later	Later	В/-	SS	PC3	
HVZ2-VD-0530	MH-67034		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0286	MH-67035		GALV.	Later	Laler	B/-	SS	PC3	
11VZ2-VD-0207	MH-67035		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0288	MH-67035		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0289	MH-67035		GALV.	Later	Later	B/-	SS	PC3	

Oliona Ton	Primary Drawing	Physical Drawing	Damper	Damper	Design Flow Rate	Frame/Seat Leakage	Safety	Seismic	Manage
Client Tag	Number (P&ID)	Number	Material	Size	(cfm)	Class		Classification	Notes
HVZ2-VD-0290	MH-67035		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0291	MH-67035		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0292	MH-67035		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0529	MH-67035		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0298	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0299	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0300	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0301	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0302	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0303	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0304	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0528	MH-67036		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0310	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0311	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0312	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0313	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0314	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0315	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0316	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0527	MH-67037		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0322	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0323	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0324	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0325	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0326	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0327	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0328	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0526	MH-67038		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0006	MH-67039		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0334	MH-67040		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0335	MH-67040		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0336	MH-67040		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0337	MH-67040		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0338	MH-67040		GALV.	Later	Later	B/-	SS	PC3	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HV72-VD-0339	MH-67040		GALV	Later	l ater	R/-	SS	PC3	
HV72-VD-0340	MH-67040		GA! V	Later	Later	B/-	SS	PC3	
HV72-VD-0525	MH-67040		GA! V	Later	Later	B/-	SS	PC3	
HVZ2-VD-0346	MH-67041		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0347	MH-67041		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0348	MH-67041		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0349	MH-67041		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0350	MH-67041		GA_V.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0351	MH-67041		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0352	MH-67041		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0524	MH-67041		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0358	MH-67042		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0359	MH-67042		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0360	MH-67042		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-D361	MH-67042		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0362	MH-67042		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0363	MH-67042		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0364	MH-67042		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0523	MH-67042		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0370	MH-67043		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0371	MH-67043		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0372	MH-67043		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0373	MH-67043		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0374	MH-67043		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0375	MH-67043		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0376	MH-67043		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0522	MH-67043		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0382	MH-67044		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0383	MH-67044		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0384	MH-67044		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0385	MH-67044		GALV	Later	Later	B/-	SS	PC3	
HVZ2-VD-0386	MH-67044		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0387	MH-67044		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0388	MH-67044		GALV	Later	Later	B/-	SS	PC3	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HVZ2-VD-0521	MH-67044		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0410	MH-67045		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0411	MH-67045		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0531	MH-67045		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0532	MH-67045		GALV.	Later	Later	B/-	SS	PC3	
HVZ2-VD-0007	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0011	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0013	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0014	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0015	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0016	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0395	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0396	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0397	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0398	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0399	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0400	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0401	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0402	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0570	MH-67047		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0017	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0018	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0020	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0022	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0032	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0033	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0403	MH-67048	7	STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0404	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0405	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0406	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0407	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0409	MH-67048		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0540	MH-67060		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0541	MH-67060		STAINLESS	Later	Later	A/-	SS	PC3	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HV72-VD-0542	MH-67060		STAINI FSS	Later	l ater	A/-	SS	PC3	
HV72-VD-0543	MH-67061		STAINI FSS	Later	l ater	A/-	SS	PC3	
HV72-VD-0544	MH-67061		STAINI FSS	Later	l ater	A/-	SS	PC3	
HVZ2-VD-0545	MH-67061		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0546	MH-67062		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0547	MH-67062		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0548	MH-67062		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0549	MH-67062		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0550	MH-67063		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0551	MH-67063		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0552	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0553	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0554	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0555	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0556	MH-67064		STAINLESS	Later	Later	A-	SS	PC3	
HVZ2-VD-0557	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0558	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0559	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0560	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ2-VD-0561	MH-67064		STAINLESS	Later	Later	A/-	SS	PC3	
HVZ3-VD-0077	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0078	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0079	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0080	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0081	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0082	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0083	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0085	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0086	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-D087	MH-67406		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0088	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-D089	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0090	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0091	MH-67407		GALV.	Later	Later	B/-	SS	PC2	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety Classification	Seismic Classification	Notes
HVZ3-VD-0092	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0093	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0230	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0330	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0331	MH-67407		GALV.	Later	Later	B/-	SS	PC2	
11VZ3-VD-0084	MH-67408		CALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0095	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0096	MH-67408	×	GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0097	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0098	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0100	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0101	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0102	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0103	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0205	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0219	MH-6/408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0231	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0232	MH-67408		GALV.	Laler	Later	B/-	SS	PC2	
HVZ3-VD-0233	MII-67408		GALY.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0234	MH-67408		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0116	MH-67409		GALV.	Later	Later	B/-	SS	PC2	
HV73-VD-0117	MH-67409		GAI V	Later	Later	B/-	SS	PC2	
HVZ3-VD-0118	MH-67409		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0119	MH-67409		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0235	MH-67409		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0236	MH-67409		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0237	MH-67409		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0250	MH-67409		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0130	MH-67410		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0238	MH-67410		GALV.	Laler	Later	C/-	SS	PC2	
1 IVZ3-VD-0240	MH-67410		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0241	MH-67410		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0120	MH-67410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0126	MH-67410		GALV.	Later	Later	B/-	SS	PC2	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
I IVZ3-VD-0127	MI I-67410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0128	MH-37410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0206	MH-67410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0207	MH-57410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0211	MH-67410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3VD-0212	MH-5/410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0213	MH-67410		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0129	MH-67411		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0243	MH-67411		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0244	MH-67411		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0245	MH-67411		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0246	MH-67411		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0247	MH-67411		GALV.	Later	Later	C/-	SS	PC2	
HV73-VD-0248	MH-67411		GAI V	Later	later	C/-	SS	PC2	
HVZ3-VD-0121	MH-67411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0122	MH-67411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3 VD 0123	MH 57411		GALV.	Later	Later	B/	SS	PC2	
I IVZ3-VD-0124	MI I-67411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0125	MH-97411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0208	MH-37411		GALV.	Later	Laler	B/-	SS	PC2	
HVZ3-VD-0209	MH-57411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0210	MH-57411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0214	MH-57411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0215	MH-5/411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0216	MH-67411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0242	MH-67411		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0139	MH-67412		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0140	MH-67412		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0131	MH-67412		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0134	MH-57412	1	GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0135	MH-57412		GALV.	Later	Later	B/-	SS	PC2	
HV73-VD-0137	MH-67412		GALV	Later	1 ater	B/-	SS	PC2	
HVZ3-VD-0218	MH-57412		GALV.	Later	Later	B/-	SS	PC2	
HVZ3 VD 0220	MH 67412		GALV.	Later	Later	B/	SS	PC2	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety Classification	Seismic Classification	Notes
HVZ3-VD-0160	MH-67413		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0161	MH-67413		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0162	MH-67413		GALV.	Later	Later	C/-	SS	PC2	
HV73-VD-0163	MH-67413		GA! V	l ater	l ater	C/-	SS	PC2	
HV73-VD-0165	MH-67413		GAI V	l ater	l ater	C/-	SS	PC2	
HV73-VD-0141	MH-67413		GAI V	Later	l ater	B/-	SS	PC2	
HV73-VD-0154	MH-67413	1	GA V	l ater	l ater	B/-	SS	PC2	
HV73-VD-0155	MH-67413		GAI V	Later	l ater	B/-	SS	PC2	
HV73-VD-0156	MH-67413		GA! V	Later	l ater	B/-	SS	PC2	
HVZ3-VD-0157	MH-67413		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0158	MH-67413		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0166	MH-67414		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0167	MH-67414		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0168	MH-67414		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0169	MH-67414		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0172	MH-67415		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0173	MH-67415		GALV	Later	Later	C/-	SS	PC2	
HVZ3-VD-0221	MH-67415		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0332	MH-67415		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0333	MH-67415		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0110A	MH-67600		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0112	MH-67600		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-D132	MH-67600		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0133	MH-67600		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0110B	MH-67603		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0110C	MH-67606		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0012	MH-67609		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0015	MH-67609		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0023	MH-67609		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0001	MH-67609		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0002	MH-67609		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0003	MH-67609		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0004	MH-67609		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0005	MH-67609		GALV	Later	Later	B/-	SS	PC2	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HV73-VD-0006	MH-67609		GALV	l ater	Later	B/-	SS	PC2	
HV73-VD-0007	MH-67609		GALV	Later	Later	R/-	SS	PC2	
HV73-VD-0008	MH-67609		GALV	Later	! ater	R/-	SS	PC2	
HVZ3-VD-0009	MH-67609		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0010	MH-67609		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0011	MH-67609		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0176	MH-67609		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0038	MH-67610		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0013	MH-67610		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0014	MH-67610		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0177	MH-67610		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0178	MH-67610		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0179	MH-67610		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0020	MH-67611		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0021	MH-67611		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0200	MH-67611		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0016	MH-67611		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0017	MH-67611		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0018	MH-67611		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0019	MH-67611		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0152	MH-67611		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0199	MH-67611		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0022	MH-67612		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0049	MH-67612		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0026	MH-67612		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0027	MH-67612		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0029	MH-67612		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0030	MH-67612		GALV	Later	Later	B/-	SS	PC2	
HVZ3-VD-0031	MH-67612		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0183	MH-67612		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0025	MH-67613		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0181	MH-67613		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0032	MH-67613		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-D075	MH-67613		GALV.	Later	Later	B/-	SS	PC2	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HVZ3-VD-0180	MH-67613		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0182	MH-67613		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0039	MH-67614		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0033	MH-6/614		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0034	MH-67614		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0035	MH-67614		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0036	MH-67614		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0037	MH-67614		GALV.	Later	Later	B/-	SS	PC2	
HVZ3 VD 0045	MH 67615		GALV.	Later	Later	C/	SS	PC2	
HVZ3-VD-0046	MH-67615		GALV.	Later	Later	C/-	SS	PC2	
HV73-VD-0113	MH-67615		GAI V	Later	Later	C/-	SS	PC2	
HVZ3-VD-0040	MH-67615		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0041	MH-67615		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0042	MH-67615		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0043	MH-67615		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0044	MH-67615		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0047	MH-6/615		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0048	MH-67615		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0056	MH-67616		GALV.	Laler	Laler	C/-	SS	PC2	
HVZ3-VD-0057	MH-67616		GALV.	Later	Later	C/-	SS	PC2	
HVZ3 VD 0058	MH 67616		GALV.	Later	Later	C/	SS	PC2	
HVZ3-VD-0059	MH-67616		GALV.	Later	Later	C/-	SS	PC2	
HV73-VD-0050	MH-67616		GALV	I ater	l ater	B/-	SS	PC2	
HVZ3-VD-0051	MH-67616		GALV.	Later	Later	B/-	SS	PC2	-
HVZ3-VD-0052	MH-67616		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0053	MH-67616		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0054	MH-67616		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0055	MH-67616		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0065	MH-67617		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0105	MH-67617		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0114	MH-67617		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0136	MH-67617		GALV.	Later	Later	C/-	SS	PC2	
11VZ3-VD-0060	MII-67617		GALV.	Later	Later	B/-	SS	PC2	
HVZ3 VD 0061	MH 67617		GALV.	Later	Later	B/	SS	PC2	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
1 IVZ3-VD-0062	MI I-67617	_	GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0003	MH-67617		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0064	MH-67617		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0066	MH-67617		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0067	MH-67617		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0068	MH-6/61/		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0094	MH-67617		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0108	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0109	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0142	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0143	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0144	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0145	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HV73-VD-0146	MH-67618		GALV	l ater	Later	C/-	SS	PC2	
HVZ3-VD-0159	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0164	MH-67618		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0069	MH-67618		GALV.	Later	Later	B/-	SS	PC2	
1 IVZ3-VD-0070	MI I-67618	1	GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0071	MH-67618		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0072	MH-67618		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0073	MH-67618		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0074	MH-67618		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0076	MH-67618		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0104	MH-6/618		GALV.	Later	Later	В/-	SS	PC2	
HVZ3-VD-0106	MH-67618		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0150	MH-67619		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0153	MH-67619		GALV.	Later	Later	C/-	SS	PC2	
HVZ3-VD-0107	MH-67619		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0115	MH-67619		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0147	MH-67619		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0148	MH-67619		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0149	MH-67619		GALV.	Later	Later	B/-	SS	PC2	
HVZ3-VD-0151	MH-67619		GALV.	Later	Later	B/-	SS	PC2	
HVZ3 VD 0099	MH 67627		GALV.	Later	Later	C/	SS	PC2	

Client Tag	Primary Drawing Number (P&ID)	Physical Drawing Number	Damper Material	Damper Size	Design Flow Rate (cfm)	Frame/Seat Leakage Class	Safety	Seismic Classification	Notes
HV73-VD-0303	MH-67900		STAINI FSS	Later	1 ater	A/-	SS	PC3	
HVZ3-VD-0304	MH-67900		STAINI FSS	Later	l ater	A/-	SS	PC3	
HV73-VD-0305	MH-67903		GAI V	l ater	l ater	B/-	SS	PC3	
HVZ3-VD-0306	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0307	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-D308	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0310	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0314	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0315	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0316	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0317	MH-67903		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0318	MH-67904		GALV.	Later	Later	B/-	SS	PC3	
HVZ3-VD-0319	MH-67904		GALV.	Later	Later	B/-	SS	PC3	
HVAD-VD-0030	MH-69000		GALV.	Later	Later	C/-	SS	PC3	
HVAD-VD-0031	MH-69000		GALV.	Later	Later	C/-	SS	PC3	
HVAD-VD-0003A	MH-69001		GALV.	Later	Later	C/-	SS	PC3	
HVAD-VD-0032	MH-69100		GALV.	Later	Later	C/-	SS	PC3	
HVAD-VD-0033	MH-69100		GALV.	Later	Later	C/-	SS	PC3	
HVAD-VD-0003B	MH-69101		GALV.	Later	Later	C/-	SS	PC3	
HVAE-VD-0005	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0006	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0007	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0008	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0009	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0010	MH-69700		GALV	Later	Later	B/-	SS	PC3	
HVAE-VD-0011	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0012	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0015	MH-69700		GALV.	Later	Later	B/-	SS	PC3	
HVAE-VD-0016	MH-69700		GALV.	Later	Later	B/-	SS	PC3	

General Notes

- Leakage Class per ASME AG-1, Appendix DA-I.
 Seat Leakage does not apply and is indicated by a dash (-).

SUPPLIER / CONTRACTOR QUESTIONAIRE

Enter Dun and Bradst	reet (DUNS) Numb	er:						
1. GENERAL INFORMAT	TION							
NAME OF COMPANY (Full Legal Name	e)							
STREET ADDRESS			CITY - STATE - ZIP CODE					
MAILING ADDRESS			CITY - STATE - ZIP CODE					
TELEPHONE	FACSIMILE			E-MAIL				
WEBSITE	TELEX/TWX/CABLE			OTHER				
A. Type of Business (check b	box or boxes)	CORPORATION OR COMPANY	SUBSIDIARY	DIVISION	PARTNERSHIP			
Name and location of Pare	ent Company			DUNS No.				
If a Division, enter name a Corporate Headquarters	and location of			DUNS No.				
If more than one DUNS no	If more than one DUNS number applies to your operation, attach additional explanatory page(s).							
B. Type of Facility (check box	x or boxes)	MANUFACTURI FABRICATOR	ER/ DISTRIBUTOR/ SUPPLY HOUSE	ASSEMBLY/ SHOP	MANUFACTURERS REPRESENTATIVE			
		CONSTRUCTIO	ARCHITECT/ ENGINEER	TECHNICAL SERVICE	GENERAL SERVICE			
		OTHER (SPECI	FY)					
C. Enter Applicable SIC Code	es:							
D. Enter Applicable NAICS C	Codes (North America):							
E. Date Business Founded:			Jnder Present Ownersh	ip Since:				
F. Number of Employees (All	l Facilities)	Manual:	N	on-Manual:				
G. Small, Disadvantaged, Wo	omen-Owned or Veterar	Status						
Check Applicable Boxes	SMALL	WOMEN-OWNED	DISADVANTAGE	D: HUB ZONE				
	VETERAN OWNED	SERVICE DISABLE VETERAN OWNER						
2. FINANCIAL INFORMA	TION (This section M	UST BE COMPLETE	D for consideration.	Information is kept C	ONFIDENTIAL.)			
A. Banking Reference:								
B. Annual Sales Volume (Las	st 3 Years): YR	\$	YR \$	YR	\$			
C. Present Net Worth			Bank	Phone No.				
Can you furnish a Performand	ce Bond? Yes	□ No						
If "Yes", indicate dollar limits.	Та \$250,000	To \$500,000	To \$1,000,000	То \$5,000,000	To \$10,000,000 \$25,000,000 and up			
Surety	Surety Agent Phone No.							
D. If required, can you furnish a Bank Guarantee or Letter of Credit? Yes No If "Yes," indicate dollar limits below:								
	_			_				
☐ To \$250,000 [То \$500,000	To \$1,000,000 Eank	To \$5,000,000	To \$10,000,000	\$25,000,000 and Up			
Guiety		Dailk		I Holle 140.				

E. Current Financial Ratios (Public companies of	only)							
Working Capital / Total Assets				Retai	ned Earnings / To	otal Assets		
Earnings Before Interest and Taxes / Total Ass	sets			Marke	et Value of Equity	/ Total Liabilities		
Sales / Total Assets								
F. Current Financial Ratios (Private companies	only)	-						
(Current Assets-Current Liabilities) / Total Assets	ets			Retai	ned Earnings / To	otal Assets		
Earnings Before Interest and Taxes / Total Ass	sets	Book Value of Equity / Total Liabilitie				Total Liabilities		
Sales / Total Assets								
3. PERSONNEL (For this location –State "Not Applicable" if the position does not exist at this location)								
A. President:			D. E	ngineer	ring Manager:			
B. Sales Manager:		E. C	A/QC N	/lanager:				
C. Production Manager:			F. F	ield Su	oport Manager:			
4. LABOR RELATIONS – Shop Fabrication (List all crafts with which you have contracts		ing agreemen	its. Cl	heck hei	re if not applicabl	е: 🔲		
CRAFT	EXPIRAT	ION DATE	L.,		CRAFT		EXPIRA	TION DATE
1.			3.					
2.			4.					
E DI ANT ODERATIONS (For this facility of	h. Haa a aa	nanata Daga	0 for 6	than fac	ellition) Ch	ook horo if not	annliaahla	П
5. PLANT OPERATIONS (For this facility on					inities) Ch	eck here if not	applicable	; <u> </u>
A. Name/Address of This Facility (if different tha	in for facility	named at top	ot Pa	ge 1)				
Name	_ Address	-				Phone		
	-					Facsimile		
B. Number of Employees at This Facility:					C. Plant in Ope	ration Since:		
D. Do you have a Quality Assurance/ program w	vritten to con	ply with the f	ollowi	ng:				
Nuclear related activities – 10CFR 830, Subpart implemented through a quality assurance program					r requirements do	ocument (Attachn	nents 2, 3 a	ind 4) as
Other: Specify								
Non Nuclear related activities – 10 CFR 830, Sub- implemented through a quality assurance program					tractor requireme	ents document (A	ttachments	2, 3 and 4) as
Other: Specify								
Nuclear Yes No	Other Ce	ertification (Pl	ease S	Specify)				
ISO 9001 Yes No Other Certification (Please Specify)								
For your Quality Assurance/Quality Control program(s), attach the Table of Contents from relevant manual(s) or, on additional pages, describe the method and level of compliance standard(s).								
E. Export Capabilities PROVIDE EXPORT F	E. Export Capabilities PROVIDE EXPORT PACKING? YES NO FAMILIAR WITH EXPORT YES NO FORMALITIES?							
F. Shipping Facilities RAIL SIDING TRUCK DOCKS WATER ACCESS WATER ACCESS DRAFT meters								

_								
6.	BIDDING INTEREST AND QUALI	FICATIONS						
A.	 A. Indicate your relebant experience and qualifications as described in the attached "Scope of Work". (Attach additional pages if necessary) 							
В.	B. Indicate appropriate Contract/Purchase Order dollar range within which you prefer, and are currently able, to bid (i.e., \$250,000 to \$1,500,000)							
\$	\$ to \$							
C.	C. Indicate Industry or Code Certifications (ASME, API, TEMA, Class of Code-Stamp, etc.)							
	CERTIFICATION	EXPIRATION DATE		CERTI	FICATION	EXPIRATION DATE		
1,			4.					
2.			5.					
3.			6.					
D.	D. Subcontract Services (List type of work normally subcontracted to others)							
1	7. PROFESSIONAL LICENSES Indicate the work category you are licensed for and the area(s) (Country/State/Province) in which you hold each. Attach additional pages, if necessary.							
TYP	PE OF LICENSE LOCATION TYPE OF LICENSE LOCATION							
1.		4.						
2.			5.					
3.			6.					
8. E	ENGINEERING, ARCHTECTURAL	AND OTHER TECHNICA	AL SER	/ICES CONTRA	CTORS / SPECI	FIC DATA LISTINGS		
	In addition to circling applicable work ca i.e., chemical engineering, hydrology, go					specialization by your firm		
В.	List Personnel by Discipline (Number or	Staff)						
	Administrative	Electrica	al Engine	ers	Ocea	nographers		
	Architects	Estimate	ors		Planr	ners (Urban/Regional)		
	Chemical Engineers	Geologi	sts		Sanit	ary Engineers		
	Construction Inspectors	Interior I	Designers	is	Spec	ification Writers		
	Draftsman	Landsca	pe Archit	ects	Struc	tural Engineers		
	Ecologists	Mechan	ical Engir	eers	Surve	eyors		
	Economists	Mining E	Engineers		Trans	sportation Engineers		
9. \	9. WORK HISTORY (Complete the attached Work History form per Appendix "C" and attach to this Questionnaire)							
Also attach a list of permanent offices and any brochures that further describe your company's activities and capabilities. Please do not include product catalogs, inventory or price lists.								
10. SAFETY & HEALTH EXPERIENCE (Complete the attached S&H form per Appendix "D" and attach to this Questionnaire)								
11. SOCIAL AND ENVIRONMENT SUSTAINABILITY INITIATIVES (Check all that are employed through company initiatives)								
	Written environmental policy		Р	roducts that have a	achieved "Cradle-to	o-Cradle" certification		
	Environmental performance integrated into corporate mission Policies and practices to minimize fuel usage or use of alternative energy							
П	Social performance integrated into corporate mission Initiatives to mitigate environmental impacts of finished							

Contract/Supplier Questionnaire

	products
Annual report detailing its mission-related performance (e.g. corporate social and environmental targets)	Code of conduct holding subsuppliers accountable for social and environmental performance
12. COMPLETED BY:	
SIGNATURE	TITLE
NAME	DATE

APPENDICES:

APPENDIX "A" - GLOSSARY FOR SMALL, DISADVANTAGED, WOMEN-OWNED AND VETERAN ENTERPRISES

APPENDIX "C" - CONTRACTOR/SUPPLIER WORK HISTORY

APPENDIX "D" - CONTRACTOR SAFETY & HEALTH QUALIFICATION DATA

APPENDIX A

GLOSSARY FOR SMALL, DISADVANTAGED, WOMEN-OWNED, AND VETERAN ENTERPRISES

Following are definitions of small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUB Zone small business concerns, minority business enterprises, small disadvantaged business concerns, women-owned small business concerns and labor surplus area business concerns (all called "Enterprises") as defined by the U.S. Federal Acquisition Regulations:

Small-Business Concern

Firms, including affiliates, that are independently owned and operated, not dominant in the field of operation in which they are bidding on Government contracts, and that qualify under the criteria and size standards for small businesses in 13 CFR Part 121 as determined by the SBA.

HUB Zone

A historically underutilized business zone which is located within one or more qualified census tracts, qualified metropolitan counties, or lands within the external boundaries of an Indian reservation. HUBZone's appear on the List of Qualified HUBZone Small Business Concerns maintained by the SBA.

Veteran-owned Small Business Concern

A small business concern – (1) not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and (2) the management and daily business operations of which are controlled by one or more veterans.

Service-disabled Veteran-owned small Business Concern

(1) A small business concern – (i) not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and (ii) The management and daily business operations of which are controlled by one or more service-disabled or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran. (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small Disadvantaged Business Concern (Minority)

An offeror that represents, as part of its offer, that it is a small business under the size standard applicable to the acquisition; and either – It self certifies as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B; and (i) No material change in disadvantaged ownership and control has occurred since its certification; (ii) Where the concern is owned by one or more disadvantaged individuals upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and (iii) It is identified, on the date of its representation, as a self certified small disadvantaged business concern in the database maintained by the SBA (Central Contractor Registration (CCR)).

Women-Owned Small Business Concern

A small business concern – 1) which is at least 51 percent owned by one or more women: or in the case of any publicly owned business, at least 51 percent of the stock which is owned by one or more women; and 2) whose management and daily operations are controlled by one or more women.

APPENDIX C

CONTRACTOR/SUPPLIER WORK HISTORY

The Contractor submits the following statement as to its experience qualifications:

- 1. If stated in the cover letter, provide only experience in work similar in type and magnitude to the identified Work Scope,
- 2. All awarded contracts have been satisfactorily completed, except as follows (Name any and all exceptions and reasons therefore, attaching additional pages if necessary):

- 3. The following contracts are currently in progress or have been satisfactorily completed within the last three years or the period specified in the cover letter.
- 4. If you have not worked in the country specified in the cover letter within the period outlined in 3 above, add a separate page listing any work ever performed in that country. [Item 4 does not apply to U.S. work.]
- 5. Column Completion Notes:
 - a. Name and Address. For past Bechtel work, include Bechtel Job No. and also asterisk any work requiring nuclear quality assurance.
 - b. Work Description. Describe work scope and then indicate if prime or subcontract.
 - c. Start/Stop. Provide starting date and actual/forecast completion by mo/yr, e.g., Jan 93/Sep94.
 - d. Schedule and Budget. State either "over", "on", or "under" the contract schedule and budget.

Contractor/SUPPLIER WORK HISTORY								
Customer Name, address, representative and phone no.	Work Description	Location	Value	Start/Stop	Schedule	Budget		

						U.i	
		-					
List any award	ied Contracts/Purchase Orders that wer	e not satisfactorily completed: (List any an	d all exceptions an	d reasons there	fore, attaching add	itional pages if ne	ecessary):

APPENDIX D

CONTRACTOR SAFETY AND HEALTH QUALIFICATION DATA

NAME	OF COMPANY:			
The ab	ove named Company submits the following Safety	& Health qualifica	ition data:	
1. SA	AFETY PERFORMANCE			
1.1.a	Provide a brief description of each fatality your frequired):	îrm has incurred ir	the three most recent	years (add pages if
Year 20			Year 20[]	
1.1.b	Provide a brief description of each fatality by an the three most recent years (add pages if require	y sub-tier subcontr		
Year 20				
1.2.a	Provide the following information on your firm fo	r the three most re		44
		20[]	20[]	20[]
a.	Number of lost workday cases.			
b.	Number of restricted workday cases.			
c.	Number of cases with medical attention only.			
d.	Number of fatalities.			
e.	Number of hours worked.			
1.2.b	Provide the following information on any sub-tie recent years:	r subcontractor wo	rking under your directi	on for the three most
		20[]	20[]	20[]
a.	Number of lost workday cases.	***************************************	Comment of the Commen	
b.	Number of restricted workday cases.			
C.	Number of cases with medical attention only.		- 2	-
d.	Number of fatalities.			
e.	Number of hours worked.			

2.	2. Are accident reports and report summaries sent to the following and how often?										
	a. b. c. d.		ent/Mana ctor	ent/Site Manag			No	Yes	Monthly	Quarterly	Annually
3.	Do	you hold site	safety m	neetings for fie	ld employ	ees both M	lanual and	d Non-Manua	al?		
	Но	Yes w Often? Weekly		No Bi-Weekly		Monthly		Less Ofte	en, As needed		
4.	Do	vou conduct	nroject s	afety inspection	ne?						
7.	БО		_		_						
		Yes	Ц	No							
		es, who cond	ucts this	inspection?							
TIT	LE								HOW OF	ΓEN?	
_	11					(10 1)		46	4-40		
5.	Ho	w are accider	nt records	s and accident	summar	es kept? H	low oπen	are tney repo	οπεα?		
	a	Accidents to	staled for	the entire con	nnanv			No	Yes	Monthly	Annually
	a. b.			the entire con	npany			No □ □	Yes	Monthly	Annually
	a. b.	Accidents to	otaled by					_	10 100 100		Annually
		Accidents to	otaled by aled by su	project uperintendent							
6.	b.	Accidents to (1) Subtota (2) Subtota	otaled by aled by su aled by fo	project uperintendent oreman		v often are t	they repor				
6.	b.	Accidents to (1) Subtota (2) Subtota	otaled by aled by su aled by fo	project uperintendent		v often are t	they repor	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□			
6.	b.	Accidents to (1) Subtota (2) Subtota w are costs of	otaled by aled by su aled by fo f individua	project uperintendent oreman al accidents k	ept? Hov	v often are t	they repor				
6.	b.	Accidents to (1) Subtota (2) Subtota w are costs of	otaled by aled by su aled by fo f individual	project uperintendent reman al accidents k entire compar	ept? Hov	v often are t	they repor	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	Yes		Annually
6.	b. Hov	Accidents to (1) Subtota (2) Subtota w are costs of Costs totale Costs totale	otaled by sualed by for individual dispression of the dispression of t	project uperintendent reman al accidents k entire compar	ept? Hov	v often are t	they repor	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	Yes	Monthly	Annually
6.	b. Hov	Accidents to (1) Subtota (2) Subtota w are costs of Costs totale Costs totale (1) Subtota	otaled by sualed by for individual dispression of the dispression of t	project uperintendent oreman al accidents k entire compar ect uperintendent	ept? Hov	v often are t	they repor	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	Yes	Monthly	Annually
6.	b. Hoto a. b.	Accidents to (1) Subtota (2) Subtota w are costs of Costs totale Costs totale (1) Subtota (2) Subtota t key Safety a	otaled by sualed by for the d by projuled by sualed by found and Health	project uperintendent oreman al accidents k entire compar ect uperintendent	ept? Hov	r this projec			Yes	Monthly	Annually
	b. Hoto a. b.	Accidents to (1) Subtota (2) Subtota w are costs of Costs totale Costs totale (1) Subtota (2) Subtota t key Safety as not been specifications	otaled by sualed by for the d by projuled by sualed by found and Health	project uperintendent oreman al accidents k entire compar ect uperintendent oreman h personnel pl	ept? Hov	r this projec nel.	t. Please	ted? No I	Yes	Monthly Grant Gra	Annually
	b. Hota a. b.	Accidents to (1) Subtota (2) Subtota w are costs of Costs totale Costs totale (1) Subtota (2) Subtota t key Safety as not been specifications	otaled by sualed by for the d by projuled by sualed by found and Health	project uperintendent oreman al accidents k entire compar ect uperintendent oreman h personnel pl	ept? Hov	r this projec nel.	t. Please	ted? No I	Yes Comparison of the compari	Monthly Grant Gra	Annually
	b. Hota a. b.	Accidents to (1) Subtota (2) Subtota w are costs of Costs totale Costs totale (1) Subtota (2) Subtota t key Safety as not been special	otaled by sualed by for the d by projuled by sualed by found and Health	project uperintendent oreman al accidents k entire compar ect uperintendent oreman h personnel pl	ept? Hov	r this projec nel.	t. Please	ted? No I	Yes Comparison of the compari	Monthly Grant Gra	Annually

8.	Do	you have a v	written sa	afety & health	program?					
		Yes		No						
	lf۱	es, submit a	copy for	evaluation.						
9.	Do	you have an	orientati	ion program fo	or new hire	es?				
		Yes		No						
	lf y	es, submit a	copy for	evaluation. D	oes it incl	ude instruc	tion on th	ne following?		
					Yes	No		-	Vaa	No
	a.	Head prote	ction		Tes		i.	Fire protection	Yes □	No □
	b.	Eye protect			П		j.	First aid facilities		
	c.	Hearing pro					k.	Emergency procedures		
	d.	Respiratory		on			1.	Toxic substances		
	e.	Safety belts					m.	Trenching and excavation		
	f.	Scaffolding					n.	Signs, barricades, flagging		
	g.	Perimeter g	uarding				0.	Electrical safety		
	h.	Housekeep	ing				p.	Rigging and crane safety		
							q.	Road Safety (Driving)		
10	Do	vou have a c	rogram i	for newly hire	d or promo	oted forem	en?			
10.	50					7.00 1010111	2111			
		Yes	П	No						
	lf y	es, submit a	copy for	evaluation. D	oes it incl	ude the foll	lowing?			
					Yes	No			Yes	No
	a.	Safe work p	ractices				e.	First aid procedures		
	b.	Safety supe	rvision				f.	Accident investigation		
	C.	Toolbox me	etings				g.	Fire protection and prevention		
	d.	Emergency	procedu	res			h.	New worker orientation		
11	Do	vou hold craf	ft "toolbo	x" safety mee	tinas?					
	50		_							
		Yes		No						
	HO	w Often? Weekly		Bi-Weekly		Monthly		Less Often, As needed		
		VVCCRIY		DI-WEEKIY		Within		Less Oiten, As needed		
12.	Do	you have a w	vritten Ha	azard Commu	nication p	rogram?				
		Yes		No						
	lf v	es. how is it in	mplemer	nted on each p	project?					
		,	F. 3.1.31		-,,-					

13.	Do you have/require Material Safety Data She	eets (M.S.D.S.) for material/chemicals/equip	ment?
	Yes □ No □		
	If yes, explain field procedure for informing cra	aft workers about potential hazards:	
14	List three (3) client references that could verify	by the quality and management commitment	of your eafaty program
174.	Name	Address	Phone No.
а.			
b.			
C.		3	-

Supplier Quality Assurance Questionnaire

Supplier or Sub-Tier Name:		SUPPLIER QUA QUEST					
Product Description: Does the manufacturer (distributors should obtain the assistance of the manufacturer to complete this) or contractor have a written Quality Assurance Program (QAP) Management System that is developed, implemented and maintained? Yes	Supplier or Sub-Tier Name:						
Does the manufacturer (distributors should obtain the assistance of the manufacturer to complete this) or contractor have a written Quality Assurance Program (QAP) Management System that is developed, implemented and maintained? Yes No Hint: Double-click on a box to default to checked, then cut and paste box for the rest of the answers.] QA/QC MANUAL TITLE REVISION AND ISSUE DATE ATTACH A TABLE OF CONTENTS OR LISTING AND OTHER SUPPORTING INFORMATION TO THE QUESTIONNAIRE QA/QC program table of contents and other supporting information attached? Yes No DIDENTIFY CODES AND/OR STANDARDS WITH WHICH YOUR QA/QC PROGRAM COMPLIES Codes/Standards/Supplements Ves No Comments/Equivalent 1. DOE Order 414.1 (identify version), Attachment 2	Location/Address of Supplier facility	(ies):					
Does the manufacturer (distributors should obtain the assistance of the manufacturer to complete this) or contractor have a written Quality Assurance Program (QAP) Management System that is developed, implemented and maintained? Yes No Hint: Double-click on a box to default to checked, then cut and paste box for the rest of the answers.] QA/QC MANUAL TITLE REVISION AND ISSUE DATE ATTACH A TABLE OF CONTENTS OR LISTING AND OTHER SUPPORTING INFORMATION TO THE QUESTIONNAIRE QA/QC program table of contents and other supporting information attached? Yes No DIDENTIFY CODES AND/OR STANDARDS WITH WHICH YOUR QA/QC PROGRAM COMPLIES Codes/Standards/Supplements Ves No Comments/Equivalent 1. DOE Order 414.1 (identify version), Attachment 2							
Assurance Program (QAP) Management System that is developed, implemented and maintained? Yes	Product Description:						
Yes No [Hint: Double-click on a box to default to checked, then cut and paste box for the rest of the answers.] QA/QC MANUAL TITLE REVISION AND ISSUE DATE ATTACH A TABLE OF CONTENTS OR LISTING AND OTHER SUPPORTING INFORMATION TO THE QUESTIONNAIRE QA/QC program table of contents and other supporting information attached? Yes No DENTIFY CODES AND/OR STANDARDS WITH WHICH YOUR QA/QC PROGRAM COMPLIES Codes/Standards/Supplements Yes No Comments/Equivalent 1. DOE Order 414.1 (identify version), Attachment 2 2. ASME NQA-1 (identify version), Attachment 2 3. ASME Section (Certificate No.) 5. What industry standards do you currently use to develop software/firmware? ASME NQA-1 acoust of the version							nis) or contractor have a written Quality
QA/QC MANUAL TITLE REVISION AND ISSUE DATE ATTACH A TABLE OF CONTENTS OR LISTING AND OTHER SUPPORTING INFORMATION TO THE QUESTIONNAIRE QA/QC program table of contents and other supporting information attached? Yes		-	_				
ATTACH A TABLE OF CONTENTS OR LISTING AND OTHER SUPPORTING INFORMATION TO THE QUESTIONNAIRE QA/QC program table of contents and other supporting information attached? Yes				hen c	ut and paste b	ox for t	he rest of the answers.]
ATTACH A TABLE OF CONTENTS OR LISTING AND OTHER SUPPORTING INFORMATION TO THE QUESTIONNAIRE QA/QC program table of contents and other supporting information attached? Yes	REVISION AND ISSUE DATE						
IDENTIFY CODES AND/OR STANDARDS WITH WHICH YOUR QA/QC PROGRAM COMPLIES Codes/Standards/Supplements Yes No Comments/Equivalent	ATTACH A TABLE OF CONTENTS O	R LISTING AND OTH	ER SU	PPOR	TING INFOR	MATIO	ON TO THE QUESTIONNAIRE
Codes/Standards/Supplements Yes No Comments/Equivalent	QA/QC program table of contents and or	her supporting informati	ion attac	ched?	Yes N	0 🗌	
1. DOE Order 414.1 (identify version), Attachment 2	IDENTIFY CODES AND/OR STAND	ARDS WITH WHICH	YOU	QA/	QC PROGR	AM CO	OMPLIES
2. ASME NQA-1 (identify year) 3. ASME Section (Certificate No			Yes	No		Co	omments/Equivalent
3. ASME Section (Certificate No.			H				
4. ISO			H	닏			
5. What industry standards do you currently use to develop software/firmware? ASME NQA-1-2008/ASME NQA-1a-2009			┞╠	ᆜ			
ASME NQA-1-2008/ASME NQA-1a-2009 Indicate whether your QA/QC Manual and/or implementing procedures address the following: ASME NQA-1 Program Elements ASME NQA-1, Requirement 1, Organization ASME NQA-1, Requirement 2, Quality Assurance Program ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel ASME NQA-1, Requirement 3, Design Control Do you develop software in accordance with NQA-1 software engineering requirements? ASME NQA-1, Requirement 4, Procurement Document Control				للبا			
ASME NQA-1-2008/ASME NQA-1a-2008 Indicate whether your QA/QC Manual and/or implementing procedures address the following: ASME NQA-1 Program Elements ASME NQA-1, Requirement 1, Organization ASME NQA-1, Requirement 2, Quality Assurance Program ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel ASME NQA-1, Requirement 3, Design Control Do you develop software in accordance with NQA-1 software engineering requirements? ASME NQA-1, Requirement 4, Procurement Document Control	5. What industry standards do you c	urrently use to develop s	oftware	e/firm	ware?		
ASME NQA-1-2008/ASME NQA-1a-2008 Indicate whether your QA/QC Manual and/or implementing procedures address the following: ASME NQA-1 Program Elements ASME NQA-1, Requirement 1, Organization ASME NQA-1, Requirement 2, Quality Assurance Program ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel ASME NQA-1, Requirement 3, Design Control Do you develop software in accordance with NQA-1 software engineering requirements? ASME NQA-1, Requirement 4, Procurement Document Control	Other Codes and Standards:						
Indicate whether your QA/QC Manual and/or implementing procedures address the following: ASME NQA-1 Program Elements ASME NQA-1, Requirement 1, Organization ASME NQA-1, Requirement 2, Quality Assurance Program ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel ASME NQA-1, Requirement 3, Design Control Do you develop software in accordance with NQA-1 software engineering requirements? ASME NQA-1, Requirement 4, Procurement Document Control	-						
ASME NQA-1 Program Elements ASME NQA-1, Requirement 1, Organization ASME NQA-1, Requirement 2, Quality Assurance Program ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel ASME NQA-1, Requirement 3, Design Control Do you develop software in accordance with NQA-1 software engineering requirements? ASME NQA-1, Requirement 4, Procurement Document Control		ASME NQA-1-2008/	ASMI	NQ	A-1a-2009		
ASME NQA-1, Requirement 1, Organization			proced	ures a			7
ASME NQA-1, Requirement 2, Quality Assurance Program ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel ASME NQA-1, Requirement 3, Design Control Do you develop software in accordance with NQA-1 software engineering requirements? ASME NQA-1, Requirement 4, Procurement Document Control					Ye	s No	Procedure/Manual
ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel ASME NQA-1, Requirement 3, Design Control Do you develop software in accordance with NQA-1 software engineering requirements? ASME NQA-1, Requirement 4, Procurement Document Control					L	ЦЦ	
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requirements? ASME NQA-1, Requirement 4, Procurement Document Control							
		with NQA-1 software eng	gineerii	ıg			
ASME NQA-1, Requirement 5, Instructions, Procedures, and Drawings	ASME NQA-1, Requirement 4, Procurer	nent Document Control					
	ASME NQA-1, Requirement 5, Instructi	ons, Procedures, and Dra	wings				

100320-SPEC-ENG-037, Safety Related Volume Control Dampers

Indicate whether your QA/QC Manual and/or implementing procedures address the following:							
ASME NQA-1 Program Elements	Yes	No		Procedure/Manual			
ASME NQA-1, Requirement 6, Document Control							
ASME NQA-1, Requirement 7, Control of Purchased Items and Services							
Do you dedicate commercial off-the-shelf software for use as a Commercial Grade Item in accordance with NQA-1 requirements?							
ASME NQA-1, Requirement 8, Identification and Control of Items							
ASME NQA-1, Requirement 9, Control of Special Processes Identify the welding codes							
ASME NQA-1, Requirement 10, Inspection							
ASME NQA-1, Requirement 11, Test Control							
ASME NQA-1, Requirement 12, Control of Measuring and Test Equipment							
Do your reference standards have a minimum accuracy four times greater than that of the measuring and test equipment being calibrated?							
ASME NQA-1, Requirement 13, Handling, Storage, and Shipping							
ASME NQA-1, Requirement 14, Inspection, Test, and Operating Status							
ASME NQA-1, Requirement 15, Control of Nonconforming Items							
ASME NQA-1, Requirement 16, Corrective Action							
ASME NQA-1, Requirement 17, Quality Assurance Records							
ASME NQA-1, Requirement 18, Audits							
ASME NQA-1, Subpart 2.2, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants							
ASME NQA-1, Subpart 2.7, Quality Assurance Requirements for Computer Software for Nuclear Facility Applications							
ASME NQA-1, Subpart 2.14, Quality Assurance Requirements for Commercial Grade Items and Services							
Identify other ASME NQA-1 Part II, Subparts applicable to the quality assurance/quality	y conti	rol pro	ogram_				
DOE ORDER 414.1							
Indicate whether your QA/QC Manual and/or implementing procedures address the							
DOE ORDER 414.1 Requirement	-4	Yes	No	Procedure/Manual			
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (1) - Program Establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing work. Establish management processes, including planning, scheduling, and providing resources for work.							
(An NQA-QA program will need to describe the management process for providing resources.)							
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (2) - Personnel Trai and Qualification Establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing work. Establish management processes, including planning, scheduling, and providing resources for work.	1						

Indicate whether your QA/QC Manual and/or implementing procedures address the following:						
DOE ORDER 414.1 Requirement	Yes	No	Procedure/Manual			
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (3) - Quality						
Improvement Establish and implement processes to detect and prevent quality problems. Identify, control, and correct items, services, and processes that do not meet established requirements. Identify the causes of problems and work to prevent them. Review item characteristics, process implementation, and other quality-related information to identify items, services, and processes needing improvement.						
(The DOE Order extends the requirements of NQA-1 to all problems including all conditions [not limited to significant] adverse to quality and to all nonconforming items [not limited to generic]).						
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (4) - Documents and						
Records Prepare, review, approve, issue, use, and revise documents to prescribe processes, specify requirements, or establish design. Specify, prepare, review, approve, and maintain records.						
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (5) - Work Processes Perform work consistent with technical standards, administrative controls, and hazard controls adopted to meet regulatory or contract requirements using approved instructions, procedures, etc. Identify and control items to ensure their proper use. Maintain items to prevent their damage, loss, or deterioration. Calibrate and maintain equipment used for process monitoring or data collection.						
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (6) - Design Design items and processes using sound engineering/scientific principles and appropriate standards. Incorporate applicable requirements and design bases in design work and design changes. Identify and control design interfaces. Verify/validate the adequacy of design products using individuals or groups other than those who performed the work. Verify/validate work before approval and implementation of the design.						
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (7) - Procurement Procure items and services that meet established requirements and perform as specified. Evaluate and select prospective suppliers on the basis of specified criteria. Establish and implement processes to ensure that approved suppliers continue to provide acceptable items and services.						
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (8) - Inspection and Acceptance Testing Inspect and test specified items, services, and processes using established acceptance and performance criteria. Calibrate and maintain equipment used for inspections and tests.						
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (9) - Management Assessment Ensure that managers assess their management processes and identify and correct problems that hinder the organization from achieving its objectives.						
DOE Order 414.1, Attachment 2, Quality Assurance Criterion (10) - Independent Assessment Plan and conduct independent assessments to measure item and service quality and the adequacy of work performance and to promote improvement. Establish sufficient authority and freedom from line management for independent assessment teams. Ensure that persons conducting independent assessments are technically qualified and knowledgeable in the						
areas to be assessed.						

Indicate whether your QA/QC Manual and/or implementing procedures address the following:						
DOE ORDER 414.1 Requirement	Yes	No	Procedure/Manual			
Preventing the introduction and use of S/CIs through engineering involvement, design, procurement, testing, inspection, maintenance, evaluation, disposition, reporting, trend analysis, and lessons learned work process controls. Training and informing managers, supervisors, and workers on S/CI processes and controls (including prevention, detection, and disposition of S/CIs). Identifying and disposing of S/CIs on site. Restricting S/CI use to only those items that have been found acceptable through engineering analysis and formal disposition process. Collecting, maintaining, disseminating, and using the most accurate, upto-date information on S/CIs and associated suppliers using all available sources. (An NQA-1 QA program will need to be expanded to address Suspect/Counterfeit items.)						
DOE Order 414.1, Attachment 2, Safety Software Quality Requirements Is your software quality assurance program based on national or international standards? If yes, identify which ones apply below: ASME NQA-1, Part I, Requirement 3ASME NQA-1, Part I, Requirement 11ASME NQA-1, Part II, Subpart 2.7 Other						
DOE Order 414.1, Attachment 2, Safety Software Quality Requirements Is your software quality assurance program based on DOE G 414.1-4, Safety Software Guide for use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance?						
DOE Order 414.1, Attachment 2, Safety Software Quality Requirements Does your quality assurance program define a process for identifying and evaluating software failures and their effects on system performance (software hazard analysis)?						
DOE Order 414.1, Attachment 2, Safety Software Quality Requirements Does your software quality assurance program define a method for grading safety software and establishing controls based on the level of importance?						
DOE Order 414.1, Attachment 2, Safety Software Quality Requirements Does your software quality assurance program include controls for software configuration management and quality planning, software risk management, software procurement and supplier management, software requirements identification and management, software design and implementation, software verification and validation, and problem reporting and corrective action?						
DOE Order 414.1, Attachment 2, Safety Software Quality Requirements Do you train personnel who design, develop, or use safety software?						
General			1			
Do you understand the questions above? Yes No Signature Title	n releva	ent to y	our quality assurance			
Date						